Lift Plan

Description:

Dismantle the concrete shielding blocks composing the Zeus Project and remove the depleted uranium #238 module and accessories to HEP's Sealand container.

Scheduled Date:

February 21-22, 2007

Project Manager:

Ken Wood and Leon Reed, HEP Division

Components:

Sealand Container
8 ft (H) x 8 ft (W) x 20 ft (L)
(8,000 lbs estimated weight)

Concrete Shielding Blocks:

18 - 3 ft x 3 ft x 7-1/2 ft
(10,000 lbs each)

8 - 3 ft x 1-1/2 ft x 12 ft
(10,000 lbs each)

1 - 3 ft x 3 ft x 1-1/2 ft
(500 lbs each)

Depleted Uranium #238 Module
(10 tons estimated weight)

Vacuum cleaning device
(400 lbs estimated weight)

Equipment to be Used:

Forklift ME#44 (26,850lbs capacity)

Forklift ME#103 (59,500 lbs capacity)

Building #366 35 ton overhead crane (M Crane #1)

FMS-DR Lowboy tractor/trailer

Slings:

1 - 15 ton 2-leg bridle (cable)
2 - 2 in x 14 ft (12,800 lbs basket, each)
2 - 3 in x 8 ft (10,800 lbs vertical each)
2 - 4 in x 10 ft (11,500 lbs vertical each)
2 - 6 in x 30 ft (16,300 lbs vertical each)

Equipment to be Used *(cont.)*:

4 - 4 ton shackles

4 - 12 ton shackles

4 - 17 ton shackles

2 - 5 ton hooks

2 - full body harnesses with lanyards

Assorted blocking/cribbing and padding material

3/8 in. diameter rope for non-conducting tag line (as needed).

Dailey-before-use hoisting/rigging inspections must be completed as only properly inspected rigging and tackle shall be used to perform this lift.

Qualified Riggers shall make all attachments/detachments for this lifting operation.

Personnel Assigned:

Tom Hallman (Person-in-Charge "PIC")
Gary Turpin
Jessie Delgadillo

Additional personnel may be assigned at the discretion of the FMS Rigger Foreman.

Note: Job assignments will remain until task is completed.

The PIC, or anyone on the scene, shall stop the lift if any unusual effects or unexpected circumstances occur.

Precautions:

Required personnel protection equipment for this job will include: normal work uniform, hard hat, safety glasses with side shields, work gloves, and film badge(s).

Full body harness and lanyard/life line tied to a 5,000 lb. secured anchorage point will be used for those working in elevated positions (as needed).

There are no electric, pneumatic, grounding or pressure concerns as equipment is presently in an inoperable mode.

HEP's HP Tech will be on the job site to survey shielding blocks and all material being moved in this lift operation.

Other Considerations:

The building manager will be notified prior to the lift so that precautions (signage/postings) will be taken so as to minimize the number of occupants in the area during lifting activities.

The work zone will be barricaded off and remain out-of-service/unavailable until job completion.

Narrative:

A pre-lift meeting with all participants shall be held prior to the beginning of the lift so as to review this procedural plan.

Prior to each full lift of a component, a trial hoist of 12 inches or less will be made to visually inspect the load and verify the estimated lift point center of gravity.

Tag lines will be employed to keep each load from turning. No person will be allowed under the material being moved at any time.

Using forklift ME#44, the Sealand type container will be placed/secured to the lowboy trailer for delivery inside building #366, where it will be offloaded using the available overhead M Crane #1. Next, the top of this container will be removed and set aside for later reattachment.

Using M Crane #1, the dismantling of the Zeus shielding block structure will begin by removing two roof as well as one side wall shielding blocks so as to gain access for HP to perform their survey of the area. After receiving an "ok to proceed", shielding which comprises the roof structure will be removed individually (by 2 point pick) to a staging area for later removal to the #377 storage yard. HEP's HP Techs will remove and relocate the sealed source container and the assembled lead bricks to a secure area within #366. This will allow access to the depleted uranium module which will be removed by the #366 overhead crane attached to HEP's dedicated 2 leg bridle, then placed in awaiting Sealand container and secured.

Next using the same arrangement, the vacuum pump device will be picked up/moved and also placed in the Sealand container. The top of this container will be reattached as before using a 4 point pick connected to M Crane #1. The container/contents will be raised employing a 4 point pick attached to the existing overhead crane and reloaded on the lowboy for transport to HEP's exterior staging area on the west side of #366. The container will be weighed (FMS-US scale) then offloaded using forklift ME#103 as before.

The remaining wall of shielding blocks will be individually dismantled using a vertical sling arrangement and use of M Crane #1 which will place them on the lowboy for relocation to the #377 storage yard, where they will be offloaded using ME#103 and stored for future use.

At job/task completion, all hoisting/rigging components and accessories used in this lift will be returned to their respective location in building #46 and secured.

Barriers/signage will be removed and job site will be restored to its original condition.